

**Amendments to the Drawings:**

The attached sheet of drawing includes changes to Fig. 3. This sheet replaces the original sheet including Fig. 3.

Fig. 3 has been labeled "prior art."

Attachment: Replacement Sheet and Annotated Sheet Showing Change

**II. REMARKS**

**A. Introduction**

In this Office Action claims 1-30 are noted as pending, claims 15-22 and 25-30 are allowed, claims 3, 4, 7, 9, 12 and 24 are objected to, and claims 1, 2, 5, 6, 8, 10, 11, 13, 14 and 23 are rejected based on prior art.

In this Response, claims 8 and 23 are canceled, claims 1-5, 9-13, 24 and 26 are amended, and remarks are provided.

**B. Claim Objections**

Claims 2, 5, 11 and 26 are objected to for various informalities.

In response, these claims have each been amended to include the article "an" prior to "excitation light".

In regard to claim 5, the Examiner has requested that the claim be amended to read "...which optically multiplexes the excitation lights emitted by the more than two more excitation light sources." The former-requested change has been made in the amended claim 5 herein. However, regarding the latter-requested change, the article "the" has been retained since there is antecedent basis in the same claim, i.e., "more than two excitation light sources".

**C. Claim Rejections Under 35 U.S.C. § 112.**

Claims 8, 23 and 26 have been rejected for lack of antecedent basis.

Claims 8 and 23 have been canceled herein. On the other hand, claim 26 has been amended herein to address this matter.

**D. Allowed/Allowable Claims**

The Examiner's indication of the allowance of claims 15-22 and 25-30 is acknowledged. Also, the Examiner has indicated that claims 3, 4, 7, 9, 12 and 24 are merely objected to as being dependent upon a rejected based claim but would be allowable if amended into independent form, where necessary.

Initially, it is noted that claim 7 is an independent claim and therefore requires no further amendment to be into allowable condition.

In regard to claims 3, 4, 9, 12 and 24, these claims have been amended into independent form as suggested by the Examiner.

Accordingly, it is believed that , at least, claims 3, 4, 7, 9, 12, 15-22 and 24-30 should now be formally allowed.

E. Rejection of Claims 8 and 23 Under 35 U.S.C. § 102

These claims are rejected as being anticipated by Terahara, U.S. Patent No. 6,271,945.

These claims have been canceled herein so the rejection is mooted.

F. Rejection of Claim 10 Under 35 U.S.C. § 102

This claim is rejected as being anticipated by Bode, et al., U.S. Patent No. 6,212,001.

For the following reasons, it is respectfully submitted that the present invention, as recited by this claim, is not anticipated by the cited reference.

Claim 10 has been amended to recite that that the characteristic of each of the plurality of tone signals is a modulation depth with which each of the tone signals is modulated. At most, the pilot tones of Bode et al. relate only to frequency.

G. Rejection of Claim 1 Under 35 U.S.C. § 103

This claim is rejected as being made obvious by a combination of the '945 and '001 references discussed above.

For the following reasons, it is respectfully submitted that the present invention, as recited by independent claim 1, was not rendered obvious by this cited combination.

Claim 1 has been amended to recite, as in, e.g., allowed claim 4, that the characteristic is the frequency or the modulation depth, features which are not taught or disclosed by the cited references, either alone or in combination.

H. Rejection of Claims 2, 5 and 6 Under 35 U.S.C. § 103

Claims 2 and 5 are rejected based on the combination discussed above, and further in view of Onaka, U.S. Patent No. 6,510,000. Claim 6 is rejected as being rendered obvious by the '945/'001 combination and further in view of Shimomura, U.S. Published Patent Application No. 2004/0114933.

Again, it is respectfully submitted that the present invention, as recited by claims 2, 5 and 6, was not rendered obvious by the cited combinations.

As noted above, independent claim 1, from which these rejected claims depend, has been amended to recite the frequency/modulation depth. As noted above, the '945 and '001 base combination of references fails to teach at least this feature, and neither Onaka nor Shimomura complete this missing disclosure.

I. Rejection of Claims 11 and 13 Under 35 U.S.C. § 103

These claims are rejected as being made obvious by a combination of the '001 and '000 references discussed above.

For the following reasons, it is respectfully submitted that the present invention, as recited by claims 11 and 13, were not rendered obvious by this combination.

As noted above, claim 10 has been amended to recite the modulation depth as the characteristic, and neither of the '001 or '000 references teaches or discloses this feature.

J. Rejection of Claim 14 Under 35 U.S.C. § 103

This claim is rejected as being made obvious by a combination of the '001 and '933 references discussed above.

It is respectfully submitted that the present invention, as recited by this claim, was not rendered obvious by this combination by the following reasons.

Claim 14 depends from amended claim 10 discussed above, which has been amended to include the modulation depth recitation as described. As noted above, the '001 reference fails to teach or disclose this feature, and the '933 reference fails to compensate for the '001 disclosure at least in this regard.

III. CONCLUSION

In light of the above amendments and remarks, it is respectfully submitted that claims 1-7, 9-22 and 24-30 are now in condition for allowance.

If there are any additional fees associated with this Response, please charge same to our Deposit Account No. 19-3935.

Finally, if there are any formal matters remaining after this Response, the undersigned would appreciate a telephone conference with the Examiner to attend to these matters.

Respectfully submitted,

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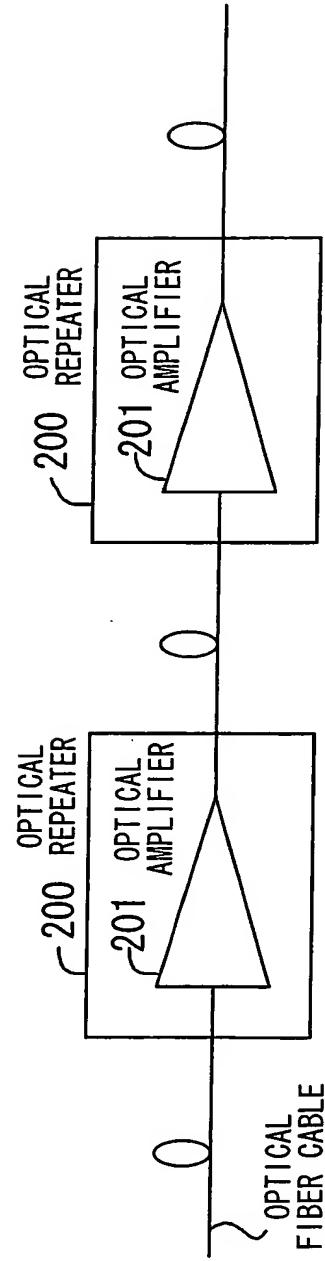


FIG. 3  
(PRIOR ART)